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No. 10

GENERAL ADMINISTRATION

Dr. Knight delivered an address on the research work of the Bureau on the processing of tung oil, at the annual meeting of the American Tung Oil Association held at Tallahassee, Fla., on April 3.

"Commercial plantings of tung trees in the United States began in 1923 and there are now about 175,000 acres under cultivation, confined largely to the Gulf Coast region," said Dr. Knight. "The commercial processing and production of tung oil in the United States started in 1932 with a production of 10,000 pounds and increased to almost 3,000,000 pounds in 1938. The two research laboratories of the Bureau are located at Gainesville, Fla., and Bogalusa, La. A pilot plant is being erected at Picayune, Miss., to carry the research work beyond the laboratory scale in order to determine whether or not the solvent method of extracting oil from the presscake will be profitable. Other lines of research undertaken by the Bureau include studies of the causes of loss of oil during milling operations and of the possibilities of industrial utilization of tung nut hulls and of the presscake remaining after extraction of the oil, together with other research which will speed the development of an ample supply of domestically produced oil."

In an address on "Research on Industrial Utilization of Corn" before the Sixth Annual Chemurgic Conference, Chicago, Ill., on March 27, Dr. Knight discussed the problems which the Northern Regional Laboratory will investigate in order to develop new and wider industrial outlets for corn and corn products.

Dr. C. A. Browne delivered an address before the American Chemical Society which met at Cincinnati, Ohio, April 8-10.

Instructions for processing and filing correspondence of the Bureau are being compiled and will be forwarded to the Regional Laboratories in the near future.

A general conference on Budget Justifications was held on April 17, which was attended by Bureau chiefs, assistant chiefs, and other administrative, fiscal and accounting officers, division leaders, and bureau budget representatives. The purpose of this conference was to consider suggestions for improving budget justifications.

James E. Scott, Chief Budget Examiner of the Budget Bureau in charge of the Department of Agriculture's estimates, was present at the meeting and discussed the type of material the Bureau of the Budget desires to have included in justifications of budget estimates.

Budget estimates were submitted by the various divisions during the week of April 14, covering requirements for the fiscal year 1942. Dr. Knight will hold hearings on these estimates some time during the latter part of April or the first of May, after which the Bureau's budget will be prepared for submission to the Secretary on or before June 1.

A. P. Aanestad, Business Manager of the Western Regional Laboratory for Research on Utilization of Farm Products, arrived in Washington on April 17, to assist in arrangements for the business activities of the laboratory during the coming fiscal year.

H. M. Johns, who has been in charge of the business activities of the Northern Regional Laboratory for Research on Utilization of Farm Products during the temporary absence of Miss Myrtle Mohagen, the Assistant Business Manager, is expected back in Washington the latter part of April.

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REGIONAL RESEARCH LABORATORIES

The tentative research projects which have been prepared for the Regional Laboratories will be presented for the consideration of representatives of the State experiment stations at conferences scheduled to be held as follows:

Northern Region in Peoria, Ill., April 19 and 20.

Eastern Region in Philadelphia, Pa., May 1 and 2.

Southern Region in New Orleans, La., May 15 and 16.

Western Region in San Francisco, Calif., June 10 and 11.

Mr. Herrick and Dr. Knight and the respective Laboratory Directors will attend these meetings.

Mr. Herrick talked to the Philadelphia Section of the American Chemical Society in Philadelphia on March 21 on the subject of "The New Regional Research Laboratories of the Department of Agriculture."

Dr. L. B. Howard, Assistant to the Director, Northern Laboratory, made a talk on "The Regional Research Laboratories" before the Galva, Ill. Rotary Club on April 2, and before the Junior Association of Commerce at Bloomington, Ill. on April 15.

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"Opportunities in Chemistry" was the subject of an informal talk which Dr. Howard gave before the Eighth Annual Conference of High School Seniors, Friday, April 12, at Bradley Polytechnic Institute in Peoria.

Dr. J. J. Williaman, Chief of the Biochemical Division, Eastern Laboratory, talked on "Research on Apples at the Eastern Regional Research Laboratory" at the meeting of the National Apple Institute in Rochester, N.Y., on April 18.

R. H. Nagel, Assistant to the Director, Western Laboratory, talked on "Work of the Western Regional Laboratory" at a meeting of the Central Coast Regional Council of the State Chamber of Commerce, Stockton, Calif., on March 29. Mr. Nagel addressed the Agricultural Department of the California State Chamber of Commerce in San Francisco on April 12, on the subject of "The Western Regional Laboratory for Research on Utilization of Farm Products."

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FARM MECHANICAL EQUIPMENT RESEARCH

The following persons visited the Washington office of the Division during the past month: Captain John Mitford of England, who called in the interest of tractor types and production in this country. B. F. Benson from Japan, seeking data on small gas producing plants, a severe drought having caused a serious shortage of hydroelectric power throughout the country. J. G. Ohsol, Economist Food Technical Bureau, Amtorg Trading Corporation, New York who was especially interested in sugar beet production machinery. Messrs. E. D. Jones of the Cleveland Tractor Company and Theo Brown of the John Deere Company. Mr. Brown had just returned from the New Jersey Agricultural Experiment Station where he had discussed among other things harvesting equipment for grass silage with a view of becoming a possible active cooperator in the studies at Sussex, N.J. Paul D. Sanders, Editor of The Southern Planter, who was given assistance in the preparation of an article "100 Years of Harvesting", similar to "100 Years of Farm Power" prepared by R. B. Gray and appearing in the March issue of The Southern Planter. The proof copy of "100 Years of Harvesting" was later reviewed in the Division

R. M. Merrill visited the Division in regard to the work at Auburn, Ala. Details relative to the cooperative tests the U. S. Rubber Company wish to conduct with rubber tires on the soil plots at the Auburn Tillage Laboratory were worked out.

Frank Irons went to Denver, Colo. the latter part of March where a demonstration of his grasshopper poison bait mixer was made in the presence of cooperating entomologists.

S. W. McBirney reports that sugar beet planting, has been very much delayed by the weather this year in Northern California.

Replanting resulting from flood conditions or from "damping off" of seedlings, is nearly completed. As a result blocking and thinning of the crop will be about a month later than normal.

In cooperation with the agronomy department of the Utah Agricultural Experiment Station, E. M. Dieffenbach is drawing plans and making estimates for the possible construction of a unit for studying the photosynthesis of plants. The plants will be fed a nutrient solution and will be supported in sand. The sand culture unit is needed for determining the best time interval for cultivation of weeds. These experiments will probably be followed by others for determining the effects of various herbicides on weeds.

G. A. Cummings left Washington April 3 for the Southern states in which fertilizer placement experiments are being conducted. At Raleigh, N.C., and at Clemson, S. C. conferences were held with members of the respective Agricultural Experiment Stations in regard to the fertilizer work. The itinerary includes Tifton and Attapulgus, Ga., Gainesville, Fla., and Florence, S. C., where conferences will be held and the experimental work inspected.

W. H. Redit left Washington the last of March in connection with the regular spring fertilizer placement experiments. During the early part of April bean and cotton experiments were completed at Tifton and shade tobacco experiments were completed at Attapulgus, Ga. Other experiments were put in later at Tifton, Ga., and at Clemson, S.C., and Starkville, Miss.

L. G. Schoenleber left Washington early in April for Florence S. C., where the National Fertilizer Association had arranged to make a colored motion picture on fertilizer application. Mr. Schoenleber's work was divided between North and South Carolina where the regular spring experiments were put in after which a survey was made of fertilizer equipment and practices on farms in the vicinity of the Experiment Stations.

Dale B. Eldredge left Washington for Ohio and Michigan via New York where an experimental pea drill was delivered at Geneva. Experiments with cannery peas were completed in Michigan. The facilities of the Bureau shop at Toledo were used in conditioning the field machines used in this section.

During the month specifications were prepared for a one-plow tractor including a line of equipment for use with a tractor; a four-wheel truck trailer; and a variable-speed transmission unit for use by members of the Division in experimental work.

CHEMICAL ENGINEERING RESEARCH

On April 9 Dr. David J. Price addressed a fire school sponsored jointly by the Pittsburgh Chamber of Commerce and the Western Pennsylvania Safety Council, the subject of his talk being, "Reducing Dust Explosion Hazards in Industrial Plants." Between 900 and 1,000 persons were present at the meeting, which was held in the ballroom of the William Penn Hotel in Pittsburgh.

Dr. Price went to New York on April 16, for a series of conferences relating to dust explosion and fire prevention matters. On April 17, he addressed the Greater New York Safety Council convention, which met at the Hotel Pennsylvania, using as his subject, "Reducing Dust Explosion Losses in Industrial Plants."

The recently developed safety code for the prevention of dust explosions in sulfur-handling plants has been printed and distributed to members of the Dust Explosion Hazards Committee of the National Fire Protection Association. Consideration will be given to the code previous to the annual meeting of the National Fire Protection Association in May where it will be presented for final approval.

Dr. Price and Harry E. Roethe are the authors of an article, "Farm Accidents Take a Heavy Toll", which was prepared for publication in an early issue of the National Grange Monthly.

Following a study of the needs of the Regional Laboratories, plans and drawings of the standard laboratory equipment required for the new buildings were in readiness for consultation with equipment-manufacturing contractors which occurred on March 21. As a result of the all-day meeting, a much better understanding was arrived at regarding construction, types of materials, etc., to be used in the laboratories. Everyone concerned felt that the conference had been very helpful.

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RURAL ELECTRIFICATION RESEARCH

George Kable, editor, "Electricity-on-the-Farm", and Harry L. Garver, drove to Blacksburg, Va., on March 18 to discuss rural electrification projects under the cooperative agreement between the Bureau and Virginia Polytechnic Institute. They stopped at Harrisonburg on their return trip March 20, to see the Shenandoah Manufacturing Company's brooder plant.

Professor C. E. Seitz, Head, Department of Agricultural Engineering, V.P.I., was in Washington April 15, conferring with S. H. McCrory and Mr. Garver on matters pertaining to research projects.

Professor T. E. Henton, of Purdue University, spent Friday and Saturday, March 22 and 23 with Oral A. Brown, at Irwinville, Ga., looking over the rural electrification project on the Farm Security Administration resettlement project there.

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INDUSTRIAL FARM PRODUCTS RESEARCH

I. G. Menikheim of the Office of Solicitor, Department of Agriculture, visited the Agricultural By-Products Laboratory at Ames, Iowa, on March 28, 29, 30 in connection with patent business of the laboratory.

On April 2 Messrs. Geo. T. Peckham, Jr., Research Supervisor, Geo. A. Smith, Robert V. McAllister, and Charles H. Geiger, Jr., of the Clinton Company (manufacturers of corn products), Clinton, Iowa, also visited the Laboratory. These men were interested in the general research work of the laboratory, and Mr. Peckham discussed with Dr. Aronovsky the possibility of doing some cooperative pulping work on corn hulls.

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FARM STRUCTURES RESEARCH

J. W. Simons, in charge of the farmhouse comfort studies at Athens, Ga., is in the Washington office working on a bulletin covering the results of the studies to date. One of the principal factors about which new information has been obtained is the effect of air infiltration on house temperatures.

M. A. R. Kelley of this Division and A. V. Krewatch of the University of Maryland recently held "open house" for a number of staff members of the Bureau and the University during the progress of tests on artificial lighting of dairy barns, which are being made in a barn at the University. Various arrangements of lights were tested for illumination and satisfactory distribution of light. Those present were Messrs. McCrory, Ashby, Garver and Hukill of this Bureau, and Professor K. C. Ikeeler, Professor M. H. Berry, Dr. K. L. Turk, Professor R. C. Carpenter, G. R. Burkhardt, R. W. Donaldson, and Mr. Herdsman of the University of Maryland.

Thayer Cleaver reports that laboratory apparatus for measuring equilibrium moisture content of grains is completed and tests are being started to supplement the data being obtained at other stations.

Otto Brunkow at Madison, Wis., has completed preliminary tests in the Richardson farmhouse which will be remodeled this summer. Plans for the remodeling of the Giese house have been completed. Additional studies are being made in the Hubbard house.

Dr. R. T. Cotton of the Bureau of Entomology and Plant Quarantine was in Ames, Iowa, for two days recently to confer with members of the Entomology Department of the College, and representatives of the State

Agricultural Conservation Committee, and Dr. H. J. Barre of this Division. The question of insect control in shelled corn bins is especially important this year because of the large amount of shelled corn stored.

A. D. Edgar recently went to Denver, Colo. from his headquarters in Scottsbluff, Nebr., to inspect commercial potato handling equipment where sacked potatoes are handled.

Publications

Farmers' Bulletin 1832 "Farm Fences", by M.A.R. Kelley
Leaflet 191 "Liquefied Gas for the Household", by A. H. Senner.

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FOOD RESEARCH

G. R. Fessenden traveled during the week of April 1, to various points in Pennsylvania, New York, and Delaware, for the purpose of conferring with manufacturers regarding materials necessary in the preparation of specimens of plants and other products for preservation in their natural state.

Harlow H. Hall has just returned from Laurel, Miss., where he has been carrying out experiments on the storage of whole, ground sweetpotatoes. This work has been done in cooperation with the Carbohydrate Research Division.

Dr. M. K. Veldhuis, in charge of the Pullman, Washington laboratory of the Division, spent April 16 in Washington conferring with Division and Bureau officials relative to the work of the Pullman station.

The Kansas State College requested James A. Berry of the Seattle, Wash. laboratory of the Division to attend a freezer locker conference and the Sigma Xi meeting at Manhattan, Kans. on April 16 and 17. Mr. Berry gave an informal address on the preservation of food by the frozen-pack method.

Four or five pieces of plastic-embedded specimens prepared by Dr. Chas. E. Sando and a number of specimens preserved by the Fessenden process are being exhibited at the Pan American Union in connection with the celebration of their fiftieth anniversary.

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PROCESSING OF FARM PRODUCTS RESEARCH

Cotton Ginning Investigations:

Chas. A. Bennett, of this Bureau, and Francis L. Gerdes of the Cooperating Bureau, the Agricultural Marketing Service, attended the Texas Ginners' Convention, Dallas, Texas, April 3-5. They participated in the program by conducting a ginning forum and answering ginners' questions on subjects pertaining to their problems.

On their return from Texas they were accompanied by S. P. Lyle of the Extension Service, who came to Stoneville for the purpose of conducting the Cotton Ginning Specialists' School, which was held during the week of April 8-11. Other visitors attending the school and presenting papers were as follows: Dr. John W. Wright, G. S. Meloy, and R. T. Doughtie, Jr., all of the Agricultural Marketing Service, U. S. Department of Agriculture. The specialists who attended expressed favorable opinions regarding the instruction and information received, which they would in turn utilize in their respective States this coming season, and it was felt that much good was accomplished. Almost every member of the Laboratory staff participated on various phases associated with the work being done at Stoneville.

Among visitors to the U. S. Cotton Ginning Laboratory during the past few weeks, were Garner M. Lester, President of the National Cotton Ginners' Association in company with some of his ginners who were particularly interested in the latest developments in ginning, pure seed systems, and modernization of gins in general. Harold K. Tinsley, In Charge, Memphis Office, Agricultural Marketing Service, with five of his field men visited the Laboratory on April 11, and joined the ginning specialists on their tour to representative gins.

Preliminary seed blowing tests are being conducted at present with a small rotary blower, in an effort to further reduce power requirements in seed handling. Most of the old ginning and feeding equipment previously used at the Laboratory has been recently replaced by the latest machinery which illustrates improved features now in use in modern gins.

The Laboratory has undertaken further simplification of the tower drier by replacing the old Wye and top-transition with a new shelf-type Wye top inlet combining the two. This has been tested and is proving to be more satisfactory and easier to operate than the old Wye-type systems.

Messrs. K. Nordahl and Chester Husman, of the Bureau of Entomology and Plant Quarantine, have been stationed at the Laboratory for the past month, while engaged in the designing and building of an aerial bait spreader which can also be adapted to other poisons and to dust. The experimental hopper has been tested with wet sawdust and found satisfactory.

Cotton Packaging Investigations:

The packaging laboratory building is being enlarged in order to make space for the installation of the new 500-pound standard-density press to be used for experimental tests during the coming season. Specifications have been written and bids received from the various gin machinery manufacturers. Preliminary indications are that it will be quite expensive. Analysis of engineering data from previous tests is progressing rapidly and approaching completion.

Dr. John W. Wright of the Agricultural Marketing Service conferred with the Laboratory staff in formulating the packaging program for the coming season.

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DIVISION OF PLANS AND SERVICE

Joseph A. Scott, Chief of the Division, has recently returned from a tour of inspection to Winter Haven, Fla., where he reviewed the progress of construction of the extension to the U. S. Citrus Products Laboratory building.

Mr. Scott also inspected the Quarantine Station, Bureau of Animal Industry, located at Newark, N.J. and consulted with Dr. Wilson relative to the completion of the manger work in the barns.

Geo. T. Hemmeter, visited the Quaker City Sheet Metal Works at Philadelphia, Pa., to review the method of insulating the sheet metal ducts in conjunction with the air conditioning system of the Eastern Regional Laboratory. After this inspection, he visited the York ice machinery plant.

Messrs. Scott and Hemmeter visited the laboratory site at Wyndmoor, Pa. to observe the progress of construction and discuss certain items of interest regarding test procedure, etc. with Geo. P. Wolf, Business Manager of the Eastern Region, with the Resident Engineer, and with the contractor's representatives.

The Division is cooperating with the staff of the Northern Regional Laboratory in the preparation and review of specifications for the Fermentation Fuels Pilot Plant to be located at the Northern Regional Laboratory. This work is approximately 75 percent complete and it is expected that bid proposals requests will be in the hands of prospective bidders within the next few weeks.

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Contracts are being prepared for the purchase of equipment and laboratory furniture for the Departmental Laboratories located at the Beltsville Research Center. It is estimated that these specifications will be ready for distribution within the next week.

The design of the special purpose air conditioning and refrigeration system for the Center Departmental Laboratory is nearing completion; construction will be started immediately on the air side equipment.

The location of the Film Storage Vault has been revised slightly so as to fit in with the general scheme which will permit ready access to the new Cartographic Laboratory proposed for erection on the site. Thumb nail sketches have been made showing several alternative designs of the exterior of the proposed Cartographic Laboratory. These have been sent to the Office of the Secretary for consideration.

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CARBOHYDRATE RESEARCH

W. R. Richee, Manager, Laurel Starch Plant, Laurel, Miss. spent about ten days in Washington in March, on business pertaining to the starch factory.

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Visitors to the Division included: Messrs. J. F. Jackson, General Agricultural Agent, Central of Georgia Railway, Savannah, Ga.; Arthur M. Field, Industrial Engineer, Chamber of Commerce, Memphis, Tenn.; Bierrenbach de Castro, Secretaria da Agricultura, Sao Paulo, Brazil; S. A. Robert, Director of Development, Gulf, Mobile and Northern Railroad, Jackson, Tenn.; T. D. Johnson, In Charge Development Department, Alabama Power Co., Birmingham, Ala.; E. B. O'Kelley, General Agricultural Agent, Atlantic Coast Line Railroad, Jacksonville, Fla.; Arthur S. Fuller, Vice President, National Adhesives Corp., N.Y. City; F. K. Howell, Buell Engineering Co., N.Y. City; R. J. Spence, Director and Industrial Engineer, Municipal Advertising Board, Pensacola, Fla., I. M. Richardson, Secretary, Chamber of Commerce, Sumter, S. C.; ex-Congressman M. C. Allgood, Gadsden, Ala.; P. K. Cooke, Essential Products Co., Boston, Mass.; William B. Duryee, Secretary of Agriculture, State of New Jersey, Trenton, N.J.; Charles Austin Mace, Secretary, Synthetic Organic Chemical Manufacturers' Association of the U.S.A., N.Y. City, Neil Kelly, U. S. Beet Sugar Association, Washington, D.C.; G. C. Denham, "Anglo-Dutch Plantations of Java", London, England; George J. Muller, Vice President, Morningstar, Nicol, Inc., N.Y. City; Conrad Spoehr, Ward Milk Products Division, Kraft-Phoenix Cheese Corp., Chicago; D. W. Cooke, United Paperboard Co., Philadelphia Pa.; G. A. Cardwell, General Agricultural Agent, Atlantic Coast Line Railroad, Wilmington, N. C.; Charles Ash, California Packing Corp., San Francisco, Calif., Roy J. Leffingwell, Secretary, Chamber of Commerce, Shreveport, La.

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Stein-Hall and Company, starch distributors, New York City, have been active recently in selling sweetpotato starch produced by the Laurel, Miss., factory. They have sold 63 carloads of last season's production, principally to cotton mills in South Carolina and North Carolina for use in sizing and finishing; a smaller portion has been sold to the food industry in the North, principally the baking industry. Sales have also been made by Dallas, Tex. and Philadelphia, Pa. distributors to the laundry, confectionery, and baking industries. Warehouse stocks have been maintained in New York City, Philadelphia, Pa., Pittsburgh, Pa., Chicago, Ill., and Dallas, Texas. Additional contracts complete the sale of the 1939-1940 starch production (about 2,750,000 lbs.) of the Laurel factory. The price obtained (4 to 4½ cents per lb. in bags, car load lots, f.o.b. Laurel, Miss.) has been quite satisfactory.

Reduction in rate for rail shipments of sweetpotato starch has recently been made effective, with acquiescence of the Interstate Commerce Commission, for Official Classification territory covering the entire area east of the Mississippi River. Previously (September, 1939), decreased rates were put into effect in Illinois Freight Association territory. This reduction has been accomplished as a result of action "S.F.A. Submittal 18727" initiated by the Southern Railway System, which in turn was supported by other railroads in the territory east of the Mississippi River. This rate reduction, which equalizes rates on starch originating in the South with rates on starch shipped into the South averages about 20 percent. For instance, the all rail rate (car-load lots) from Laurel, Miss. to New York City is now 64 cents as compared with the previous rate of 80 cents per 100 pounds, and the rail and water rate is 62 cents as compared with 78 cents per 100 pounds. Prior to manufacture of sweetpotato starch, no starch had originated commercially in the South except for a small quantity of "Florida arrowroot" starch previously produced near Miami, Fla.

Dr. W. Gordon Rose, who is in charge of the construction and operation of the Tung Oil Solvent Extraction Plant at Picayune, Miss., returned to Washington the first part of March. Later, after spending two weeks at the Gainesville, Fla., Tung Oil Laboratory, he returned to Picayune, Miss., in order to supervise construction of the plant, material and equipment for which had been delivered during his absence. The plant is now in operation.

Reports covering the first period (90 days) of the beef cattle feeding tests with sweetpotato meal supplied by the dehydration pilot plant, Laurel, Miss., which have been received from the West Tennessee, Georgia and Alabama Agricultural Experiment Station show a favorable comparison of sweetpotatoes with corn, both as to cost and as to rate of gain in weight. Much interest in the possibility of substituting sweetpotatoes for corn as a carbohydrate constituent in feeding rations is being displayed throughout the South. Requests are being received from southern experiment stations for further supplies of sweetpotato meal for beef and dairy cattle and hog feeding tests. Dir. H. P. Stuckey

of the Georgia Station, who was a caller at the Division not long ago, expressed the opinion that an abundant source of carbohydrates is the "bottle neck" in the endeavor to develop the beef cattle and dairy industries in the South. One-half ton of sweetpotato meal was also supplied to the Alabama Experiment Station by the dehydration pilot plant, Laurel, Miss., for use in poultry feeding tests which are now under way.

Information recently received from Italy is to the effect that a company known as "Societa Anonima Colture ed Industrie Autarchiche (S.A.C.I.A.)" with initial capital (for year 1940) of 10,000,000 lire, has been formed for the purpose of manufacturing sweetpotato starch in Italy, Albania and colonies of the Italian Empire, this development being based on the work of this Division at Laurel, Miss. The company will operate under an Italian law promoting "autarchia" (national economic self-sufficiency) whereby material assistance is given by the Italian government. Prof. E. Parisi, Director, Istituto di Industrie Agrarie, University of Milan, who is adviser to the Italian government on industrial utilization of agricultural materials and who visited the Laurel, Miss., sweetpotato starch factory in 1937, is actively interested in this development, as is also Alberto Robuschi of Rome, who was formerly in charge of a branch of the Banca Commerciale (of Italy) in Philadelphia. Prof. Parisi and others have published several articles in Italian journals regarding the Laurel development. Experimental centers for the culture of sweetpotatoes, including high starch content varieties obtained from the United States, are being established in the Provinces of Rovigo, Ferrara and Grosseto. It is planned to erect a number of factories, three in the near future and one immediately. In addition to plans for supplying the whole of Italy's starch requirements, consideration is being given to erection of factories in Albania, Sicily and Libya for the purpose of developing exports to Egypt, and Balkans and the Near East.

Dr. R. S. McKinney of the Gainesville, Fla. Tung Oil Laboratory, who is in charge of the work on tung oil and accessory products, attended the 6th annual meeting of the American Tung Oil Association in Tallahassee, Fla., April 3-4.

M. A. McCalip, in charge of the Baton Rouge, La., field station, was a recent visitor in Washington en route to New York City.

Dr. H. G. Ukkelberg, who is in charge of research at Henry Ford's Richmond Hill Plantation, Ways, Ga., and who has a well equipped laboratory there, is interested in the work done by the Division on utilization of sweetpotatoes and is conducting experiments with the objective of further reducing the cost of growing this crop on a tonnage basis for industrial use.

NAVAL STORES RESEARCH

C. F. Speh, made a trip to the Naval Stores Station, for conference with the Station Staff, on March 12. He also visited the University of Florida, Gainesville, Fla. and Brunswick and Savannah, Ga., to discuss naval stores matters with producers and factors. He returned to Washington on March 17.

Dr. Lloyd M. Joshel attended the meetings of the American Chemical Society at Cincinnati, Ohio, April 8 to 12.

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Publications Appearing Outside the Department

Balls, A. K. and Hale, W. S. A sulfur-bearing constituent of the petroleum ether extract of wheat flour. *Cereal Chem.* XVII(2) 243-245, March, 1940.

Balls, A. K. and Hoover, S. R. The behavior of Ovomucin in the Liquefaction of egg white. *Ind. and Eng. Chem.* vol. 32, p. 594, April (1940).

Bennett, Chas. A. Recent ginning modernization in the delta. *The Delta Council News*, Stoneville, Mississippi 1 (7): 4, Mar. 20, 1940.

_____, and Gerdes, F. L. (Agricultural Marketing Service) Some regional influences on ginning problems and methods. *Texas Cotton Ginner's Jour.* XI(7): 13, 16, 18, 19, and 42, Apr. 1940.

Bernton, H. S., Spies, J. R., and Stevens, H. Significance of cotton-seed sensitiveness. *The Jour. of Allergy* 11 (2): 138-146, Jan. 1940.

Etchells, J. L. The incidence of yeasts in cucumber fermentations (abstract). *Fruit Prod. Jour. and Amer. Vinegar Indus.* 19(7): 212, March, 1940.

Heid, J. L. Utilization of crops by canning, freezing, drying investigated. *The Mission Times* XXXI(15): 1 & 5, Sec. 6, Jan. 12, 1940.

Knight, H. G. Research helped Laurel - and how. *Laurel Leader Call* XL (121): 13, March 7, 1940.

McBirney, S. W. Equipment for single seed planting. *Sugar Beet Bul.* IV (3): March, 1940.

Maxwell, L. R. An electrical method for compounding sine functions. *Rev. Sci. Instruments* 11(2): 47-54, February, 1940.

Nolte, A. J. and Von Loesecke, H. W. Possibilities of preparing lactic acid from grapefruit juice. *Fruit Prod. Jour. & Amer. Vinegar Indus.* 19(7): 204-05: 216-17; 220, March, 1940.

Price, D. J. Dust explosions in industrial plants can be avoided. *Occup. Hazards* 2(6): 8-10 & 28-30, March, 1940.

Smith, A. K. and Max, H. J. Soybean protein dispersions in formaldehyde solutions. Preparation and Application. *Indus. & Engin. Chem.* 32(3): 411-415, March, 1940.

Veldhuis, M. K., Etchells, J. L. (With I. D. Jones and O. Veerhoff, Dept. of Horticulture, N.C. State College). Observations on the influence of the addition of sugar to brines in cucumber fermentations (Abs.) *Fruit Prod. Jour. & Amer. Vinegar Indus.* 19(7): 213, March, 1940.

Walton, G. P. Honey utilization committee, American Honey Institute. *Inst. Inklings* 3(7): 2, March, 1940.

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CHANGES IN PERSONNEL

Recent Appointments - Indefinite or Probationary.

Paul L. Yost	Asst. Messenger	Business Adminis.
Herbert C. Henry Jr.	Jr. Sugar Technologist	Carbohydrate Res. Div.
Harlow L. Walster	Collaborator (Fargo, N.Dak.)	Indus. Farm. Products.
Charles H. Fisher	Senior Chemist	Reg.Res. Lab.(Eastern)
Anne T. Crowley	Jr. Clerk-Stenog.	" " " "
Harold Robert Hay	Associate Chemist	" " " (Northern)
Kenneth B. Raper	Microbiologist	" " " "
Harry Humfeld	Microbiologist	" " " (Western)
Marguerite M. Kupfer	Asst. Clerk-Stenog.	" " " "
W. Dayton Maclay	Chemist	" " " "
W. Berkeley Grizzard	Agent (CC) (Lafayette, Ind.)	Rural Electrification Res.

Recent Appointments - Temporary

Jeannette Bodeau	Jr. Stenographer	Bus. Adm.(Bookkeeping)
Noah J. Halbrook	Minor Scientific Helper (Gainesville, Fla.)	Carbohydrate Res.
Mary L. Paulik	Jr. Clerk-Stenog.	Farm Structures Res.
Henry Thomas Lisante	Senior Architectural Drafts-	man. Plans and Service
June Mary Schwartz.	Jr. Stenog.	Reg.Res.Lab. (Admin.)
Alex R. Rehrig	Agent (CC)(Lincoln, Neb.)	Rural Electrification Res.

Separations

Wayne D. Rasmussen	Asst. Clerk (Trans. to B.A.E.)	Bus. Admin. (Files)
Mrs. Ruth Gregg Condon	Jr. Clerk-Typist	" " "
Marie L. Dugazon	Asst. Clerk-Stenog. (Trans. to B.P.I.)	Naval Stores.

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